(12) UK Patent Application (19) GB (11) 2 354 657 (13) A

(43) Date of A Publication 28.03.2001

(21) Application No 9922147.5

(22) Date of Filing 21.09.1999

(71) Applicant(s)
Graeme Quantrill
Bedwell & Co, Mill Lane, ESSEX, CO14 8PF,
United Kingdom

(72) Inventor(s)
Graeme Quantrill

(74) Agent and/or Address for Service
Ralph Gilbert
42 Kings Court, BISHOPS STORTFORD, Hertfordshire,
CM23 2AB, United Kingdom

(51) INT CL[7]
H04N 7/18

(52) UK CL (Edition S)
H4F FAAE F12S F32

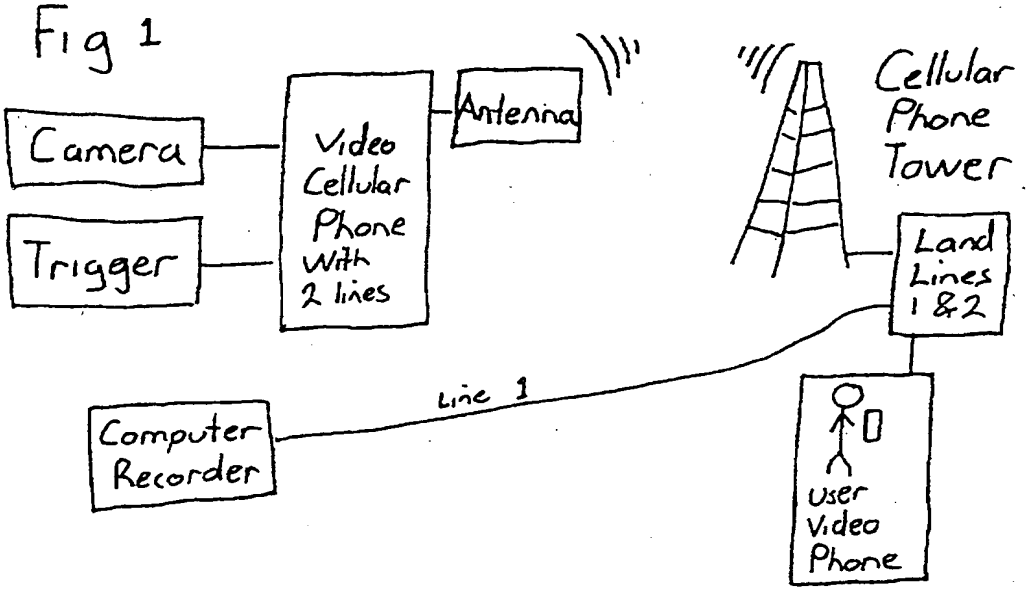
(56) Documents Cited
GB 2335523 A GB 2305808 A GB 2296156 A
GB 2287152 A JP 110041669 A US 5893037 A
US 5441047 A

(58) Field of Search
UK CL (Edition Q) H4F FAAE
INT CL[6] H04N 7/18
ONLINE: WPI, JAPIO, EPODOC

(54) Abstract Title
Portable audio/video surveillance device

(57) A portable surveillance device is described wherein a cellular telephone is attached to a camera, said phone being capable of transmitting audio and video data to either a monitoring station or a user when activated by a trigger signal. The device can be triggered either remotely by dialling said telephone and inputting a security code, or, by using a separate trigger device such as an infra-red sensor or an electrical differential sensor, which may be connected directly to said device.

Fig 1



GB 2 354 657 A

Fig 1

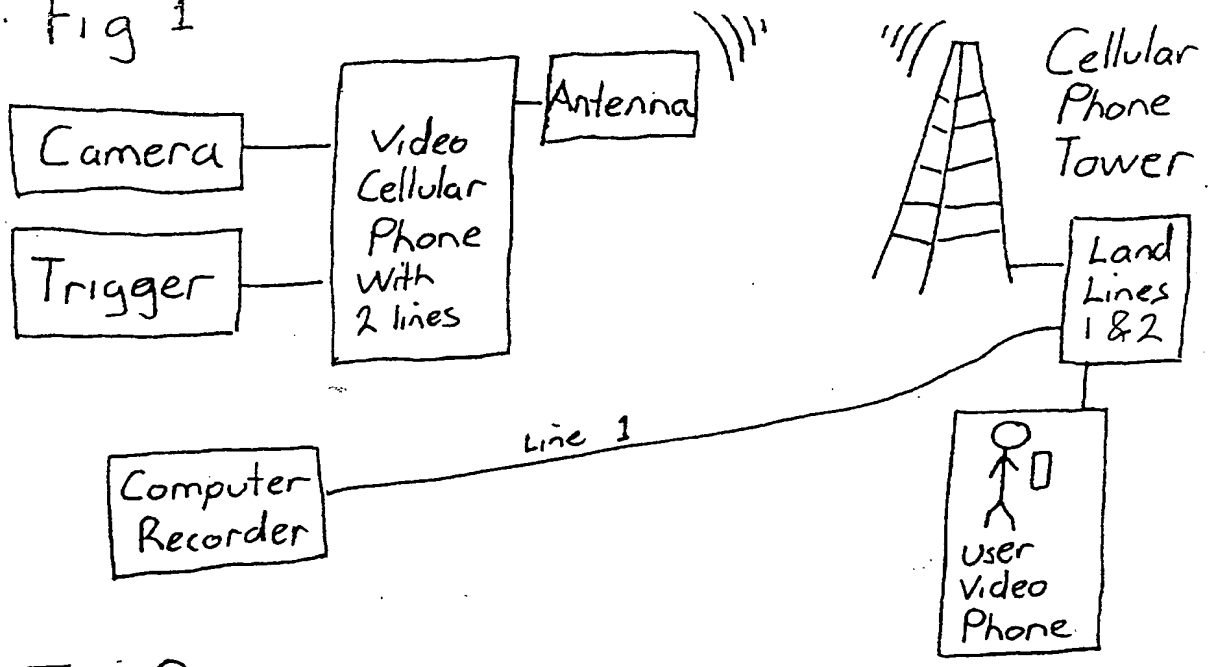


Fig 2

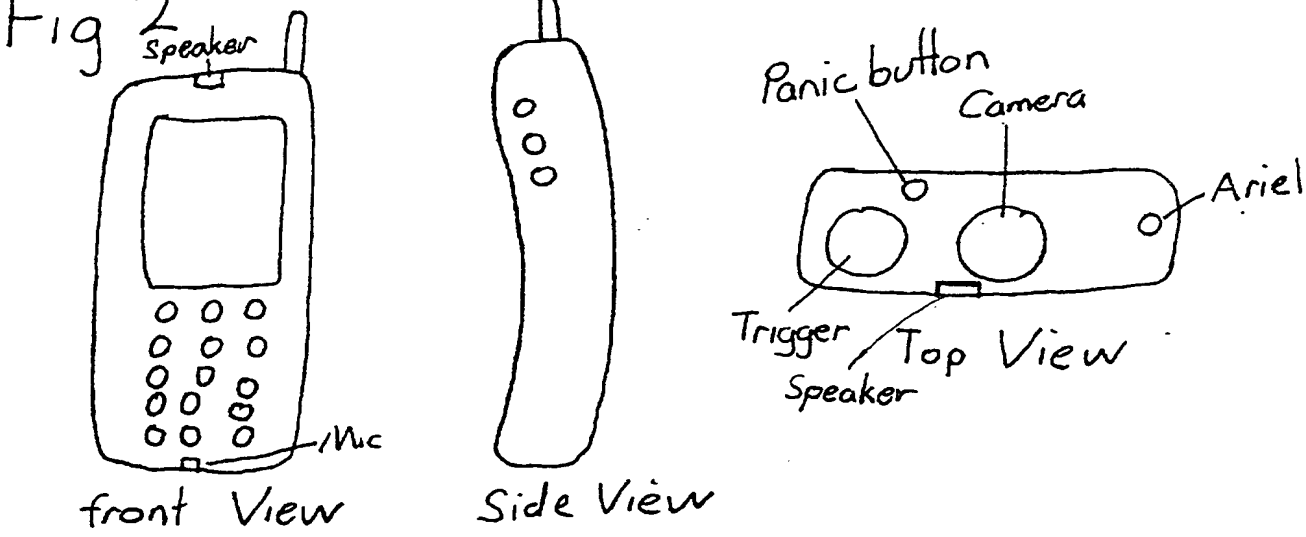
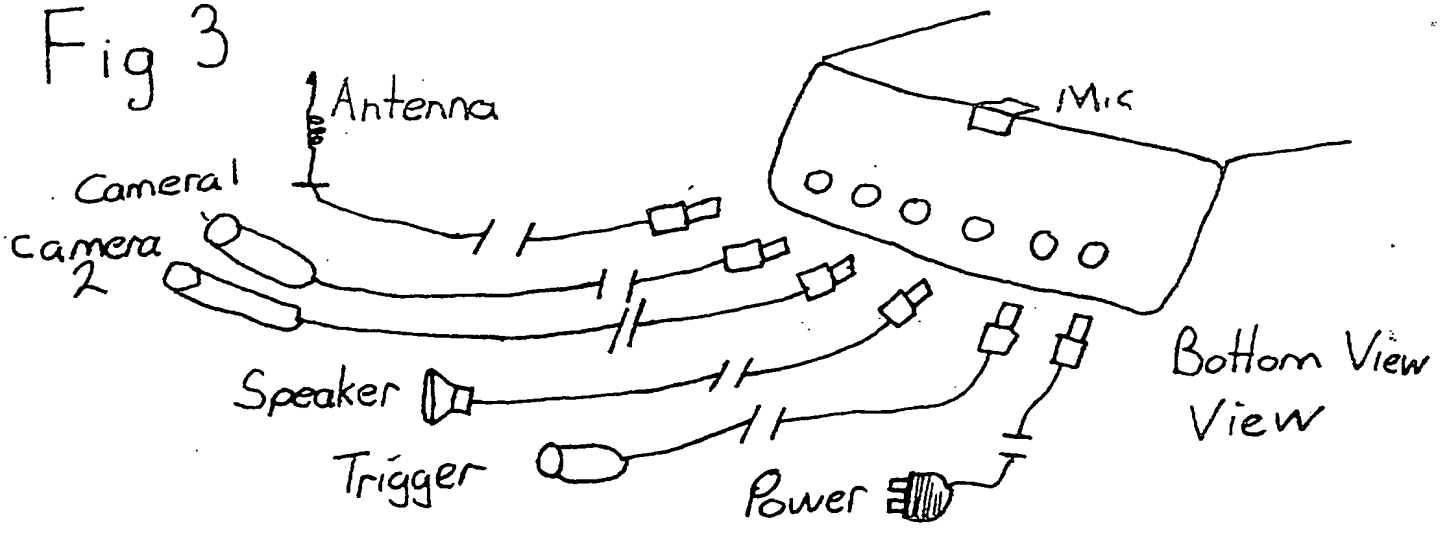


Fig 3



DESCRIPTION

REMOTE SURVEILLANCE ALARM DEVICE

This invention relates to a compact , portable , self contained , remote security surveillance / alarm device that when activated records and sends video & audio data in real time to a central computer/ monitor and the user , using audio/video cellular phone technology.

This surveillance device solves the problems encountered convicting perpetrators due to evidence being destroyed on site by perpetrators , or of defeating the surveillance system by cutting wires .

The device would be similar to an audio/video cellular phone with differences as follows :- when set as well as storing audio/video data in its own memory it would automatically transmit audio/video signals upon being triggered by the additional incorporated internal or external trigger to the designated destination points for real time viewing as well as recording .This would let you know your device has been triggered and if you have a video phone you could remotely view what's going on as it's happening . An additional advantage is that you could converse with a perpetrator or if you are unavailable , the computer monitor could be set to send a pre-recorded message. The device could be triggered remotely from anywhere at any time by dialling its number along with a changeable security code from another video phone , thus the user is reassured all is well .

The trigger can be one of , or a combination of , many such devices available , for example : infra-red , space , thermal or electrical differential . The device would have a manual "panic button" trigger as well for use in a situation such as a mugging and also be able to be triggered remotely by phoning the device . Unauthorised remote triggering and viewing would be prevented by a security code .

The device would also have external plugs/jacks so one could plug in an external camera/cameras , speaker , trigger/triggers , antenna and external power for extended use.

The size and shape of the device would be small enough to easily be carried in a pocket so that the user could place it anywhere at anytime , orienting the trigger and camera part in the desired direction .

An example of the invention will now be described with reference to the accompanying drawings .

Figure 1 Shows a flow diagram of how the device works .
The device would be similar to a cellular phone with audio/video functions . When set it would automatically store and transmit audio/video data signals via cellular telephone lines upon being triggered by the internal/external trigger to the designated destination point/points for real time viewing as well as recording .

Figure 2 Shows an example of the device incorporated into a video cellular phone . when triggered the phone would automatically dial into the designated telephone line/lines .

Figure 3 Shows an example using plug-in accessories for protecting a car or a yacht . The device could be situated in a completely hidden place with wires from the above mentioned externals being able to be plugged in . The camera could be incorporated in the dash disguised as a warning light , the trigger the same , the antenna could be placed on the rear window shelf and the speaker could be anywhere .The combinations would only be limited by the imagination of the installer .The wiring for the externals could be installed permanently in one or more places , cars , yachts , home so as only the device need be moved , or they could be easily removable for simple installation elsewhere .

CLAIMS

REMOTE SURVEILLANCE ALARM DEVICE

1) The device can be transported and used in or at any property as a pocket sized completely self contained device .

2) The device when triggered will automatically send a audio/video phone signal via a cellular network to a computer for recording of audio/visual data solving the problems encountered in convicting perpetrators due to evidence or the device itself being destroyed at the property its protecting .As well as storing audio/video data in its own memory .

3) The device can be triggered remotely using a security code for real time viewing using a video cellular or video land-line phone at anytime .Thus reassuring the user all is well .

4) The device has jacks/plugs so as to allow external cameras , speakers , triggers , external power or an antenna to be connected if so desired .

5) The device enables the user to see and converse with , or send a message to , a person who has triggered it in real time .

Application No: GB 9922147.5
Claims searched: 1-5

Examiner: Frank D. Moeschler
Date of search: 17 December 1999

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.Q): H4F (AEE)

Int Cl (Ed.6): H04N 7/18

Other: Online: WPI, JAPIO, EPODOC

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X, Y	GB2335523A	(ASCOT MANAGEMENT) See Pages 2 & 5	X:1,2,45 Y:3
X, Y	GB2305808A	(MOTOROLA) See Page 10	X:1,45 Y:3
X, Y	GB2296156A	(VISION-1) See Pages 5, 8-9 and Fig 1	X:1,45 Y:3
X, Y	GB2287152A	(TOAD INNOVATIONS) See pages 2-5	X:1,2,45 Y:3
X, Y	US5893037	(REELE et al) See Cols 1 and 5	X:1,2,45 Y:3
Y	US5441047	(DAVID et al) See Col 14	3
X, Y	JP11-41669	(SHIN CATERPILLAR MITSUBISHI) See abstract	X:1,45 Y:3

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.